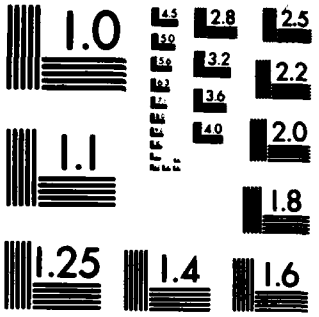
AD-A130 439 THE NEED FOR A COMPREHENSIVE MENTAL HEALTH INFORMATION 1/1
SYSTEM 1 DATA REQU..(U) NAVAL HEALTH RESEARCH CENTER
SAN DIEGO CA R B CHAFFEE ET AL. JUL 80
UNCLASSIFIED NAVHLTHRSCHC-80-19 F/G 5/10 NL

END
DATE FILMED
8 83
DTIC



THE NEED FOR A COMPREHENSIVE MENTAL HEALTH INFORMATION SYSTEM: I. DATA REQUIREMENTS OF LOCAL CLINICIANS AND ADMINISTRATORS IN NAVY PSYCHIATRY

R. B. CHAFFEE

H. J. T. SEARS

REPORT NO. 80-19

THE NEED FOR A COMPREHENSIVE MENTAL HEALTH INFORMATION SYSTEM: I. DATA REQUIREMENTS OF LOCAL CLINICIANS AND ADMINISTRATORS IN NAVY PSYCHIATRY*

LT R. Blake Chaffee, MSC, USNR[1]

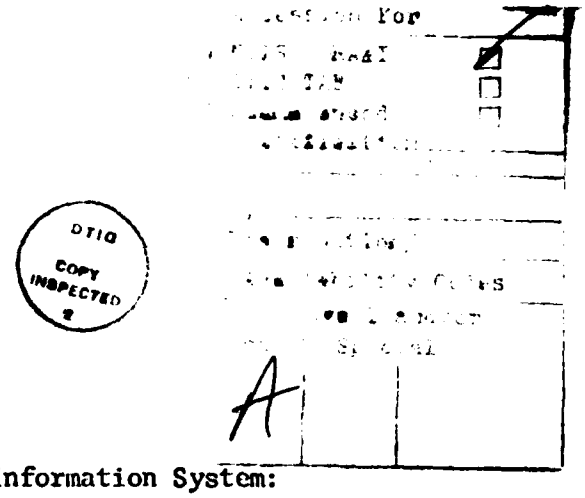
CAPT H. J. T. Sears, MC, USN[2]

Naval Health Research Center
P.O. Box 85122
San Diego, California 92138

[1] LT Chaffee is a clinical psychologist in the Environmental Medicine Department, Naval Health Research Center.

[2] Captain Sears is Chief, Psychiatric Services, Naval Regional Medical Center, San Diego, CA 92134.

* Report No. 80-19, supported by Naval Medical Research and Development Command, Department of the Navy, under Research Work Unit MR0000101-6023. The views presented are those of the authors. No endorsement by the Department of the Navy has been given or should be inferred.



The Need for a Comprehensive Mental Health Information System: I. Data Requirements of Local Clinicians and Administrators in Navy Psychiatry

LT R. Blake Chaffee, MSC, USNR

CAPT H. J. T. Sears, MC, USN

The proper management of clinical services is a very difficult task, and the directions that clinical services take are often driven by such relatively irrelevant factors as patient or organizational demand, technological innovations, current fads of practice or training in the specialty, outdated health care concepts, comfortable modes of administrative functioning, and, although in Navy practice there is no profit motive, we are sometimes influenced by the economically motivated practices of the civilian sector.

This paper addresses what the authors see as the basic building block for the enlightened management of a clinical service, namely, a standardized, systematic data base. We will outline why such a data base is required, why the current approach is inadequate, and will indicate what can be accomplished with such a data base. A second paper will describe the development of a com-

prehensive information system which relies on a state-of-the-art data processing approach. Although the principles herein apply to all clinical services, psychiatry will be used as the prototype service since this approach is currently being developed in the Psychiatry Service at the Naval Regional Medical Center, San Diego, California.

The lack of a standardized, systematic data base in Navy psychiatry prevents intelligent management decisions, distorts development of appropriate service delivery approaches, promotes misplaced emphases in education and training, and presents a serious obstacle to useful research. Summary data currently reported are incomplete, inaccurate, and invalid. Basic problems within the profession that are particularly acute within the Navy underlie this lack of valid information; specifically, these problems are the lack of standard terminology and poor quality of medical records that are often illegible, incomplete, and difficult to retrieve. These factors produce an inadequate basis for systematic documentation which is essential for current standards of accountability (3). The difficulty derives not only from what is collected (and what is not collected) but from how it is collected, processed, and used.

Present reporting systems (NAVMED 6300/1 and 6520/5) produce only gross summary statistics that are useless to the local clinician or administrator. Data currently collected are limited to frequency counts and are not descriptive. The diagnostic and disposition categories of these reporting systems are not sufficiently specific; that is, clinically relevant data are lost when discrete categories are grouped into supercategories. The category

"Personality Disorders" (NAVMED 6520/5) is a case in point. Because personality disorders constitute a major psychiatric problem for the Navy (1), specificity in reporting is crucial; however, all personality disorder subtypes, all types of sexual deviations, all categories of alcoholism, and all types of drug dependence are subsumed under the single category. Disposition categories include only "To Duty," "Discharged," or "Other" (NAVMED 6520/5). Data pertaining to treatment are not even collected. Because the integrity of data on individual cases is not preserved, there is no way to "track" patients through the mental health care delivery system. Process evaluation, the description of who does what to whom for what reason, is impossible with such inadequate data. Most importantly, the data collected do not reflect the range of clinicians' activities. The number of patients a clinician sees does not adequately reflect his work load--it represents only one subset of his activities. The clinician's valuable time is also productively spent in consultation and liaison with other clinicians, clinical services, commands, and with operational units as well as in supervision, teaching, and administrative functions, yet present systems do not allow for reporting such activities. The data currently collected, therefore, provide insufficient criteria for management decisions, e.g., determining staffing requirements. Likewise, assessment of clinical needs and program evaluation cannot be meaningfully done. Finally, the validity of the data reported via present systems is suspect because the data are typically collected retrospectively, often based on clinicians' recall. Therefore, reports generated from the present reporting systems are of little value to anyone--neither the local administrator nor

those in higher authority who base decisions on the available data.

Data Needs of Individual Clinicians

The needs of individual clinicians for immediate and constant access to accurate data relevant to clinical decision-making and the management of individual cases may be even more acute. The necessary data include anamnestic information, description of how the individual became an identified patient, evaluation of the patient's current level of personal and interpersonal functioning, psychological assessment results, and current information on the availability of Navy and civilian services relevant to the patient's problem. In addition, clinicians need data applicable to patient management, e.g., treatment plans and goals, current objectives of treatment, patient progress, and the results of any medical consultations. A planned and structured data collection system would facilitate rapport with referral sources and community agencies and prompt the acquisition of comprehensive clinical data. Readily accessible, accurate, complete, and current data on individual patients also would facilitate liaison with the patient's command or other departments involved in a patient's case (e.g., the legal service) and would provide a standard, systematic basis for documentation and accountability.

Nowhere within Navy psychiatry does the capability exist to assemble, store, and display complete and relevant patient information in a standardized format that is immediately accessible. This makes it difficult to determine the basis for previous clinical decisions made by other clinicians at other Navy facilities and contributes to discrepancies in diagnosis and errors in subsequent patient management. Collecting specific data on individual cases

in a standardized format and processing and storing it in a manner that makes it readily available within and across Navy facilities would contribute to resolving such discrepancies by facilitating communication and delineating areas of disagreement. Standardization of terminology and evaluation of professional practices would be enhanced, thereby improving the efficiency and quality of mental health care delivered.

Presently no standard data pertaining to referral sources, patient characteristics, services provided, disposition, and posttreatment follow-up and outcome are collected on individual cases at Navy psychiatric facilities. Thus, it is not possible to determine referral patterns, utilization of services, effectiveness of psychotherapeutic interventions, or opportunities for preventive consultation. Needs assessment, process analysis, and program evaluation based on such data would indicate knowledge areas that should be stressed and clinical approaches and skills that are needed. Education and training programs could then be developed that appropriately meet the needs of the indicated service delivery approaches.

Data for Local Administrators

To overcome the deficiencies noted above and to construct an adequate mental health information system, it must be recognized that the data requirements of present reporting systems differ from those of local clinicians and administrators. The local administrator needs detailed descriptive data so that he can determine patterns of utilization by various subgroups of the military and dependent populations described in terms of standard demographic variables and other patient characteristics over time and across facilities.

This would facilitate the process of needs assessment within a region. Similar data on referral patterns would indicate the need for and the effects of consultation. Ongoing work load summaries for individual clinicians, staff groups by discipline (psychiatrists, psychologists, social workers, psychiatric nurses, or NP technicians), and mental health treatment teams would provide data on staff utilization to answer such questions as:

-- What do staff members do?

-- How do staff distribute their time?

-- Are staff members engaged in activities that meet the most pressing needs of the population efficiently?

-- Is what staff members do consistent with their training?

-- Is what staff members do effective?

Effectiveness of services could be evaluated if work load summary data were related to referral patterns, patient progress, and posttreatment follow-up. Such analyses would be valuable to the local administrator for advising line commands about policy or procedural changes that could improve the management of operational units, for determining high-risk groups, and for indicating preventive measures that might be effective in reducing morbidity.

Data for Research

Research to date has not been clinically useful beyond a grossly descriptive level because it has not pertained to specific facilities, patient populations, or time periods and has not been concerned with the delivery of mental health care services. With an adequate information system, important research opportunities would become available that do not presently exist.

The efficacy of psychotherapy, a crucial issue currently confronting the field, is only one area in which Navy psychiatry has the potential to make unique contributions given its organization, the nature and accessibility of its populations, and the possibilities for follow-up. Of special importance to Navy medicine is the fact that valid data on outpatient psychiatric service utilization would also permit investigation of the relationship between mental health intervention and utilization of medical services. Recent evidence (2) suggests that reductions in general medical care utilization follow mental health interventions. Add to this fact the estimate that 50% of patients entering the Navy health care delivery system present problems that reflect primarily social and emotional needs rather than organic medical problems (4) and the potential savings in cost and time for Navy medicine rendered by timely psychiatric intervention becomes clear.

Implications for Medical Quality Assurance

A comprehensive mental health information system would assemble, store, integrate, and display the information outlined above in a standardized format that is immediately accessible and constantly available. Such a system could efficiently accomplish medical audit and utilization review procedures required by medical quality assurance and accreditation programs and seems the only realistic means to meet the criteria these programs establish.

In the present climate where conservation and full utilization of fiscal and manpower resources are vital, the impact of mental disorders on naval personnel cannot be overlooked. Immediate and constant access to complete, well organized, and relevant patient data means that clinicians could make better

informed and more timely interventions, both in terms of direct services and preventive approaches. Improving the effectiveness of mental health services would prove cost-effective by reducing the number of man-days lost to noneffectiveness and reducing the numbers of medical board, physical evaluation board, and administrative separations due to mental disorders. A comprehensive mental health information system also is likely to increase the retention of Medical Department professionals because of the enhanced professionalism and satisfaction that would result.

The needs of local clinicians and administrators in Navy psychiatry for systematic data are acute, and the reasons for developing and implementing a comprehensive mental health information system to meet those needs are compelling. Prototypes are available and have proven successful within the civilian psychiatric community. Despite this, we in Navy psychiatry remain woefully behind the state-of-the-art.

References

1. Goffman JM, Gunderson EKE: Prognosis for personality disorders in the naval service. Report No. 75-25. Naval Health Research Center, San Diego, California, 1975.

2. Jones KR, Vischi TR: Impact of alcohol, drug abuse and mental health treatment on medical care utilization: A review of the research literature. Medical Care 12:(Supplement). December 1979.

3. Marshall E: Psychotherapy faces test of worth. Science 207:35-36, January 1980.

4. Sears HJT: Radical approach to health care delivery. U.S. Navy Medicine 68:15-16, February 1977.

AD-A130 434

4. TITLE (and Subtitle) The Need for a Comprehensive Mental Health Information System: I. Data Requirements of Local Clinicians and Administrators in Navy Psychiatry	5. TYPE OF REPORT & PERIOD COVERED Initial 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) R. Blake Chaffee and H. J. T. Sears	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Health Research Center P.O. Box 85122 San Diego, California 92138	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS MR00001.01-6023 61152N
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Medical Research and Development Command Bethesda, Maryland 20014	12. REPORT DATE July 1980 13. NUMBER OF PAGES 10
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) Bureau of Medicine and Surgery Department of the Navy Washington, D.C. 20372	15. SECURITY CLASS. (of this report) UNCLASSIFIED 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Mental health
Psychiatry
Medical records
Information systems
Patient management

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

There is an urgent need for the development of a comprehensive mental health information system to meet the data requirements of local clinicians and administrators. Present reporting systems are of little use for management or clinical decisions and existing records tend to be incomplete and inaccurate. Referral, diagnosis, treatment, and outcome are inadequately documented, and the nature and range of clinicians' activities are not reflected. A comprehensive mental health information system would permit analysis of referral sources, patient characteristics, services provided, disposition, and post-

treatment follow-up leading to improved health care delivery. Medical audit and utilization review would be facilitated. Also, satisfaction, effectiveness and retention of Medical Department personnel would be enhanced.